

S1 Table. Plant accessions and treatments for transcriptome sequencing of Swiss *A. alpina* and *C. hirsuta*.*

Species	Sample Origin	Tissue type	Treatment	Sample
<i>Arabis alpina</i>	multiple ¹	leaf	Cold (1 day at 4°C)	6
<i>Arabis alpina</i>	multiple ¹	leaf	Cold (1 day at 4°C)	7
<i>Arabis alpina</i>	multiple ¹	root	Cold (1 day at 4°C)	11
<i>Arabis alpina</i>	multiple ¹	root	Cold (1 day at 4°C)	12
<i>Arabis alpina</i>	multiple ¹	root	Cold (1 day at 4°C)	13
<i>Arabis alpina</i>	multiple ¹	leaf	Drought	50
<i>Arabis alpina</i>	multiple ¹	root	Drought	58
<i>Arabis alpina</i>	multiple ¹	leaf	Drought	59
<i>Arabis alpina</i>	multiple ¹	leaf	Drought	63
<i>Arabis alpina</i>	multiple ¹	root	Drought	65
<i>Arabis alpina</i>	multiple ¹	leaf	Cold (2 days at -6°C)	118
<i>Arabis alpina</i>	multiple ¹	root	Cold (2 days at -6°C)	137
<i>Arabis alpina</i>	multiple ¹	root	Cold (2 days at -6°C)	140
<i>Arabis alpina</i>	multiple ¹	leaf	Heat (2 days at 40°C x2h)	159
<i>Arabis alpina</i>	multiple ¹	root	Heat (2 days at 40°C x2h)	199
<i>Arabis alpina</i>	multiple ¹	root	Heat (2 days at 40°C x2h)	200
<i>Arabis alpina</i>	multiple ¹	root	Heat (2 days at 40°C x2h)	202
<i>Arabis alpina</i>	multiple ²	leaf	Cold (1 day at 4°C)	19
<i>Arabis alpina</i>	multiple ²	root	Cold (1 day at 4°C)	23
<i>Arabis alpina</i>	multiple ²	root	Cold (1 day at 4°C)	26
<i>Arabis alpina</i>	multiple ²	leaf	Cold (2 days at -6°C)	129
<i>Arabis alpina</i>	multiple ²	root	Cold (2 days at -6°C)	135
<i>Arabis alpina</i>	multiple ²	leaf	Heat (2 days at 40°C x2h)	167
<i>Arabis alpina</i>	multiple ²	root	Heat (2 days at 40°C x2h)	205
<i>Arabis alpina</i>	8.53°E 46.53°N	silique, flower	no	U076-2
<i>Arabis alpina</i>	8.53°E 46.53°N	flower	no	U719-2
<i>Cardamine hirsuta</i>	8.37°E 47.21°N	leaf	Cold (1 day at 4°C)	34
<i>Cardamine hirsuta</i>	8.37°E 47.21°N	root	Cold (1 day at 4°C)	38
<i>Cardamine hirsuta</i>	8.37°E 47.21°N	leaf	Drought	70
<i>Cardamine hirsuta</i>	8.37°E 47.21°N	root	Drought	71
<i>Cardamine hirsuta</i>	8.37°E 47.21°N	leaf	Cold (2 days at -6°C)	103
<i>Cardamine hirsuta</i>	8.37°E 47.21°N	root	Cold (2 days at -6°C)	142
<i>Cardamine hirsuta</i>	8.37°E 47.21°N	leaf	Heat (2 days at 40°C x2h)	171
<i>Cardamine hirsuta</i>	8.37°E 47.21°N	leaf	Heat (2 days at 40°C x2h)	173
<i>Cardamine hirsuta</i>	8.37°E 47.21°N	root	Heat (2 days at 40°C x2h)	191
<i>Cardamine hirsuta</i>	8.56°E 46.01°N	leaf	Cold (1 day at 4°C)	27
<i>Cardamine hirsuta</i>	8.56°E 46.01°N	root	Cold (1 day at 4°C)	30
<i>Cardamine hirsuta</i>	8.56°E 46.01°N	leaf	Drought	93
<i>Cardamine hirsuta</i>	8.56°E 46.01°N	root	Drought	95
<i>Cardamine hirsuta</i>	8.56°E 46.01°N	leaf	Cold (2 days at -6°C)	105
<i>Cardamine hirsuta</i>	8.56°E 46.01°N	root	Cold (2 days at -6°C)	154
<i>Cardamine hirsuta</i>	8.56°E 46.01°N	root	Cold (2 days at -6°C)	156
<i>Cardamine hirsuta</i>	8.56°E 46.01°N	leaf	Heat (2 days at 40°C x2h)	174
<i>Cardamine hirsuta</i>	8.56°E 46.01°N	root	Heat (2 days at 40°C x2h)	194
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	leaf	Cold (1 day at 4°C)	39
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	root	Cold (1 day at 4°C)	46
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	root	Cold (1 day at 4°C)	48
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	leaf	Drought	80
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	root	Drought	86
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	root	Drought	88
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	leaf	Cold (2 days at -6°C)	113
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	root	Cold (2 days at -6°C)	147
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	leaf	Heat (2 days at 40°C x2h)	180
<i>Cardamine hirsuta</i>	6.03°E 46.11°N	root	Heat (2 days at 40°C x2h)	184
<i>Cardamine hirsuta</i>	8.43°E 47.16°N	flower	no	206
<i>Cardamine hirsuta</i>	8.43°E 47.16°N	flower	no	207
<i>Cardamine hirsuta</i>	8.43°E 47.16°N	flower	no	208
<i>Cardamine hirsuta</i>	8.43°E 47.16°N	flower	no	209
<i>Cardamine hirsuta</i>	8.43°E 47.16°N	flower	no	210

*Sample origin refers to sampling location, tissue type refers to sampled tissue for RNA extraction, Treatment refers to applied stress treatment with details in brackets, before tissue was collected, respectively. ¹ Pooled samples from three populations from 8.86°E 47.06°N, 8.91°E 47.06°N and 9.05°E 47.09°N. ² Pooled samples from three populations from 9.35°E 47.24°N, 9.02°E 47.08°N and 9.43°E 46.97°N.